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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MARTINEZ, DAVID E

ART UNIT PAPER NUMBER

2181

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/645,510	Applicant(s) TU, CHUN-YEN	
	Examiner David E. Martinez	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Applicant's election with traverse of Group II - claims 2-12, in the reply filed on 10/12/05 is acknowledged. The traversal is on the ground(s) that according to the applicant, Group I – claim 1, would not be a burden to examine for the examiner. This is not found persuasive because Group I – Claim 1 would be a burden to examine for the examiner. It is clearly directed to a separate and distinct invention as a combination/subcombination as explained in the previous election/restriction requirement dated 9/12/05. Because the inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper and is therefore made FINAL.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 2-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A data signal" is non-statutory subject matter for at least the reason that is not tangibly embodied in a matter as to be executable.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. ,

Claims 2-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 2, the terms “command code character”, “initial address character”, “data-length character”, and “data-conception character” which are included in the data signal, are all terms that “define” data. This defining of data renders the claim indefinite and unclear since these “characters” *represent* data inside the data signal, rather than define it.

Furthermore, the declarations of an “initial address character”, a “data-length character”, and a “data-conception character”, all of which “follow” a previous declared character, is unclear and indefinite. It is not understood if the stated characters (“initial address character”, “data-length character”, and “data-conception character”) follow, as in to come after a previously declared character (“command code character”, “initial address character”, and “data-length character” respectively), where there can be other undeclared elements in between, or if they follow each other in a contiguous manner without any other elements between them.

With regards to claim 3, line 2, the term “wherein the character” renders the claim indefinite and unclear. It is not understood what particular character it is referring to. It can be any of the “command code character”, the “initial address character”, the “data-length character”, and “data-conception character”. Furthermore, the character comprising eight bits, one parity bit, and a responding bit is unclear. It is not understood if the character totals 10 bits (8 bits plus a parity bit plus a responding bit) or if it totals 8 bits (including a parity bit and a responding bit).

With regards to claim 4, it is not clear how the first four bits can “determine the transmission rate of data”. Perhaps, they might be used by an apparatus to conclude a transmission rate of data, but bits by themselves cannot determine anything. A bit by itself is just a binary digit used to express a 1 or a 0 and therefore cannot determine anything.

With regards to claim 6, the use of the term “defines” renders the claim indefinite for the same reasons as those set forth above under the claim 2 rejection. It isn’t clear how the

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character comprised of bits can "define" something. The bits it is referring to *represent* something, and cannot define it.

With regards to claims 5, and 7-12, they incorporate the same deficiencies as their parent claim and thus they are rejected based on the same rationale.

Due to the vagueness and a lack of clear definiteness in the claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,940,401 to Frazier, Jr. et al. (hereinafter Frazier).

With regards to claim 2, Frazier teaches a data transmission method for microprocessors in a signal used in a data programmable logic controller comprising:

a command code character, which defines the initial value of data [figs 1 and 2, element labeled 'Preamble'];

an initial address character, which follows the command code character and defines the initial address of data [figs 1 and 2, element labeled 'DA' or 'SA'];

a data-length character, which follows the initial address character and defines the data length [figs 1 and 2, element labeled 'Type/Length']; and

at least one data-conception character, which follows the data length character [figs 1 and 2, element labeled 'Data'].

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Conclusion

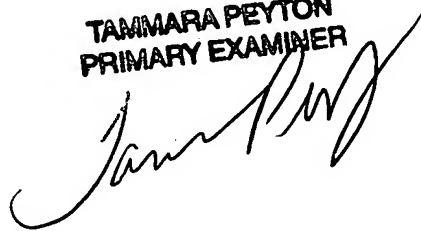
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEM

TAMMARA PEYTON
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Tammara Peyton', is written over the printed name and title.